KURATOWSKI, K., akademik.

Scientific activity of the Mathematical Institute of the Polish
Academy of Sciences. Usp.mat.nauk 10 no.3:217-221 '55.

(MLRA 9:1)

1.Director matematicheskogo instituta Pol'skoy Akademii nauk.
(Poland--Mathematics)

KURATOWSKI, Kazimierz

"Waclaw Sierpinski," by Kazimierz Kuratowski, full member of the Polish Academy
of Sciences. Nauka Polska, Polish Academy of Sciences, Warsaw, 4th Year, No. 1(13),
1956.

KURATOWSKI, V.

Kuratowski, K. Quelques propriétés de l'espace des ensembles LC^n. Bull. Acad. Polon. Sci. Cl. III. 5 (1957), 967–974, LXXXI. (Russian summary)

Let Y be a complete metric space; the family $LC^n(Y)$ of all its compact LC^n subsets can be made into a complete metric space [Kuratowski, Fund. Math. 43 (1956), 114–138; MR 18, 58]. It is shown here that if $A \in LC^n(Y)$, X is a perfect compact space, dim $X \leq n+1$, and $f: X \to A$ is continuous, $f(X) = A$, then for every $\varepsilon > 0$ there is a neighborhood $\mathfrak{U}$ of A in $LC^n(Y)$ such that for every $B \in \mathfrak{U}$ there is a $g: X \to B$ with $g(X) = B$ and $|g - f| < \varepsilon$. As consequence: If $A \in LC^n(Y)$, dim $A = m \leq n+1$, there is a neighborhood of A in $LC^n(Y)$ composed exclusively of sets with dimension $\geq m$. More generally, if $A \in LC^n(Y)$ has a property invariant under "small transformations" [Kuratowski, Topologie, v. II, Warszawa, 1952; MR 14, 892], there is a neighborhood of A in $LC^n(Y)$ composed exclusively of sets having the same property.   *J. Dugundji* (Los Angeles, Calif.)

★ Kuratowski, Casimir. Topologie. Vol. I. 4ème éd. Monografie Matematyczne, Tom 20. Państwowe Wydawnictwo Naukowe, Warsaw, 1958. xiii+494 pp. This is essentially a reprint of the 3rd edition [MR 14, 1000; for 2nd edition see MR 10, 389], with an appendix in which the author gives a brief account of some of the topics not contained in earlier editions. These are, in particular, the concepts of completely regular space, bicompact space, and the Cartesian product of Tychonov. The appendix also contains two short notes, one by A. Mostowski on some applications of topology to mathematical logic, the other by R. Sikorski on the applications of topology to functional analysis.

August 10, 1959

On the Extension of the Concept of a Rational Functions in an n-Dimensional Euclidean Space

Kuratowski, K. Sur l'extension de la notion de fonction rationnelle à l'espace euclidien n-dimensionnel. Bull. Acad. Polon. Sci. Sér. Sci. Math. Astr. Phys. 6 (1958), 281–287.

Let F be a compact subset of n-dimensional euclidean space $\mathfrak{E}^n$ ($n \geq 2$), let $\mathfrak{S}_n$ be the n-sphere identified with the one point compactification of $\mathfrak{E}^n$, and let $\mathfrak{P}_n$ denote $\mathfrak{E}^n$ minus its origin. Let $\mathfrak{B}_{n-1}(F)$ denote the set of homotopy classes of continuous mappings of F into $\mathfrak{P}_n$. $\mathfrak{B}_{n-1}(F)$ is an abelian group by means of the cohomotopy multiplication. Denoting by R_0 the unbounded component of $\mathfrak{E}^n - F$ and by $R_1, R_2, \cdots$ the sequence of bounded components of $\mathfrak{E}^n - F$, let $p_i \in R_i$ for $i = 1, 2, \cdots$. The main result of the paper is the following theorem: The homotopy classes of the translations $(x - p_1)|F$, $(x - p_2)|F$, $\cdots$ form a free system of generators of $\mathfrak{B}_{n-1}(F)$.

The arguments are similar to those of Borsuk [Fund. Math. 37 (1950), 217–241; MR 13, 150]. The author asserts that his main objective is to prove an analogous result for open subsets G (in place of F) to appear in a subsequent paper.   E. H. Spanier (Princeton, N.J.)

KURATOWSKI, K.

16(1)

PHASE I BOOK EXPLOITATION

SOV/2660

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956

Trudy, t. 4: Kratkoye soderzhaniye sektsionnykh dokladov. Doklady inostrannykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow. vol. 4: Summary of Sectional Reports. Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Eds.: M.: O.N. Shereehenko; Editorial Board: A.A. Abramov, V.G. Boltyanskiy, L.A. Vasil'yev, B.V. Medvedev, L.D. Ryabko, S.M. Nikol'skiy (Resp. Ed.), I.G. Petrovskiy, Yu. V. Prokhorov, M.A. Kreines, P. L. Ul'yanov, V.A. Uspenskiy, N.G. Chetayev, G. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and "If the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Boltyanskiy, V. (Poland). On spaces of sets connected in a-..................................200

Eilenberg, S. (Poland). Certain applications of the concept of an open mapping..................................200

Jaworowski, Yu. (Poland). Theorems on antipodes..................................200

Section on Geometry

Blaschke, W. (German Federal Republic). On topological differential geometry..................................201

Buseman, G. (Germany). Partially projective spaces (Kagan space)..................................204

Severi, F. (Italy). The irregularity of algebraic varieties. Topological problem..................................204

Segre, B. (Italy). Local and general properties of the der-..................................208

Card 32/34

KURATOWSKI, K.

"Development of mathematics in People's Democracy of Poland."

POKROKY MATEMATIKY, FYSIKY A ASTRONOMIE, Praha, Czechoslovakia, Vol. 4, no. 2, 1959

Monthly List of EAST EUROPEAN ACCESSIONS INDEX (EEAI), LC, Vol. 8, No. 7, July 1959

Unclassified

KURATOWSKI, Kazimierz

Ten years of the State Institute of Mathematics. Review Pol Academy
4 no.3:16-32 '59. (EEAI 9:6)

1. Delivered at the meeting held in celebration of the State
Institute of Mathematics decennium on Dec. 13, 1958.
        (Poland-- Mathematics)

EILENBERG, S. (New York, N.Y.); KURATOWSKI, K. (Warszawa)

A remark on duality. Fund mat 50 no.5:515-517 '62.

ENGELKING, R.; KURATOWSKI, K. (Warszawa)

Some theorems of Boolean algebra and their topological applications.
Fund mat 50 no.5:519-535 '62.

KURATOWSKI, Kazimierz

Fifty volumes of "Fundamenta Mathematicae"; recollections and
notes. Review Pol Academy 8 no.2:23-29 Ap-Je '63.

KURATOVSKI, K. [Kuratowski, K.]

Characterization of regular structures by means of exponential topology. Dokl. AN SSSR 155 no. 4:751-752 Ap '64. (MIRA 17:5)

1. Varshavskiy universitet, Varshava, Pol'skaya Narodnaya Respublika. Predstavleno akademikom P.S.Aleksandrovym.

KURATOWSKI, K.

Mappings of topological spaces into lattices and into
Brouwerian algebras. Bul Ac Pol mat 12 no. 1: 9-16 '64

1. Institute of Mathematics, Polish Academy of Sciences,
Department of Mathematics and Physics, University, Warsaw.

KURATOWSKI, Kazimierz

Fifty volumes of Fundamenta Mathematicae; remembrances and remarks.
Nauka polska 11 no.2:28-34 Mr-Ap '63.

1. Czlonek rzeczywisty Polskiej Akademii Nauk, Warszawa.

KRIUSHIN, V.N.; RYAZANKIN, V.N., prof., retsenzent; KURATSEV, L.Ye.,
    red.izd-va; DEMKINA, N.F., tekhn. red.

[Relay attachments for T-5M tabulators and S45-6 sort-
ing machines] Releinye pristavki k tabuliatoram T-5M i
sortiroval'nym mashinam S45-6. Moskva, Mashgiz, 1963. 79 p.
                                            (MIRA 17:2)

VASIL'YEV, A.G.; KLEMPNER, K.S.; TATOCHENKO, L.K., doktor tekhn.
nauk, retsenzent; VERKHOVSKIY, B.I., inzh., red.;
KURATSEV, L.Ye., red.izd-va; SMIRNOVA, G.V., tekhn.red.

[Relay devices with nuclear radiation sources] Releinye
ustroistva s istochnikami iadernogo izlucheniia. Moskva,
Mashgiz, 1963. 166 p.   (MIRA 17:3)

MALIKOV, G.F.; ..fanasiev, A.D.; RODIONOVICH, A.M.; GORIN, . .;
    inzh., otvennent; KONARI LY, L.Yo., inzh., red.

    [Design of elastic strain-measuring elements] Raschety up-
    rugikh tenzometricheskikh elementov. Moskva, Mashino-
    stroenie, 1964. 190 p.   (MIRA 17:12)

BRUYEVICH, N.V.; BREYTMAN, Z.M.; REZNIKOV, Yu.M.; MIKHAYLOV, N.V.,
inzh., retsenzent; KURATTSEV, L.Ye., red.; GORDEYEVA,
L.P., tekhn. red.

[Technical measurements in the bearing industry] Tekhni-
cheskie izmereniia v podshipnikovoi promyshlennosti. Mo-
skva, Mashgiz, 1963. 198 p.   (MIRA 17:2)

BALAKSHIN, O.B.; VIKHMAN, V.S., doktor tekhn. nauk, retsenzent;
      KURATTSEV, L.Ye., inzh., red.

      [Automation of pneumatic control of dimensions in the
      manufacture of machinery] Avtomatizatsiia pnevmaticheskogo
      kontrolia razmerov v mashinostroenii. Moskva, Mashino-
      stroenie, 1964. 363 p.   (MIRA 17:10)

AGEYKIN, D.I.; KOSTINA, Ye.N.; KUZNETSOVA, N.N.; STROGANOV,
        L.P., inzh., red.; KURATTSEV, L.Ye., inzh., red.

        [Regulation and control transducers; reference materials]
        Datchiki kontrolia i regulirovaniia; spravochnye materialy.
        2., perer. i dop. izd. Moskva, Mashinostroenie, 1965.
        928 p.   (MIRA 18:6)

KURAYEV, A.; ZUBAREV, A.

The ZII-157 high-roadability three-axle motortruck. Avt. transp. 36
no.11:37-41 N '58.　　　　　　　　　　　　　　　　(MIRA 11:11)
　　　　(Motortrucks)

ACC NR: AT6022259   SOURCE CODE: UR/0000/66/000/000/0080/0087

AUTHOR: Kurayev, A. A.; Stepukhovich, V. A.

ORG: none

TITLE: Using the variable isochronism of electron oscillations for enhancing the efficiency of phasochronous devices

SOURCE: Vsesoyu znaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya elektroniki. Doklady. Moscow, 1966, 80-87

TOPIC TAGS: SHF amplifier, SHF oscillator, strophotron, traveling wave tube, backward wave tube

ABSTRACT: Four cascade arrangements are theoretically considered of a strophotron in whose first (bunching) sections the electron oscillations are non-isochronous while in the output sections the oscillations are isochronous. The SHF voltage is applied between the positive-electrode segments and between the negative plates (see figure); the strength of the field x-component is practically constant with-in a wide range of x. It is demonstrated that a system of equations describin.. ..

Card 1/2

ACC NR: AT6022259
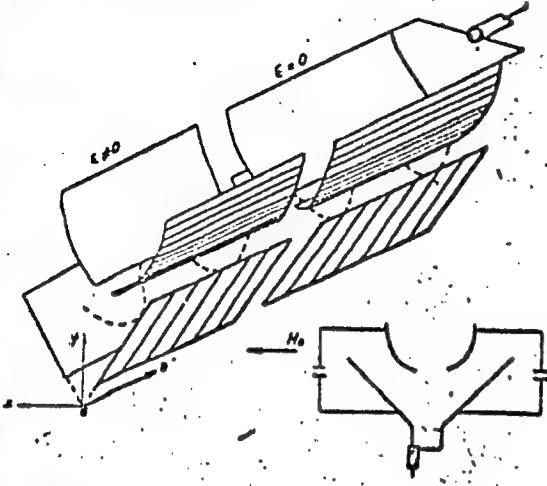
strophotron bunching section can be replaced by a system of nonlinear equations describing TW and BW tubes. The strophotron output section is described by another system of differential equations whose solution yields new equations that describe the amplitude and phase of the output SHF voltage. It is found that the maximum tube efficiency is independent of its gain parameter μ. A numerical example, which uses J. D. Rowe's results, shows that the above cascade strophotron has better than double the efficiency of the conventional strophotron. Orig. art. has: 3 figures and 28 formulas.

SUB CODE: 09 / SUBM DATE: 09Apr66 / ORIG REF: 001

Card 2/2

L 20693-66   EWT(1)/EWA(h)
ACC NR: AP6008297   SOURCE CODE: UR/0109/66/011/003/0553/0555

AUTHOR: Kurayev, A. A.

ORG: none

TITLE: Possibility of parametric amplification in axially nonuniform systems having centrifugal electrostatic focusing

SOURCE: Radiotekhnika i elektronika, v. 11, no. 3, 1966, 553-555

TOPIC TAGS: electronic amplification, parametric amplification

ABSTRACT: Periodic space variation of the focusing voltage in an axially nonuniform system (see Fig. 1) can be used for parametric amplification of cyclotron-type oscillations of electrons. Coupling elements 1 and 3 are described by R. H. Pantell (Mikrowellenrohren, Vortrage der Internat. Tagung, München, 1960, 6 386-389). amplifying section 2 may be connected in two ways (see Fig. 2): (a) the focusing-voltage periodicity is due to different voltages on the alternate screen elements or (b) the periodicity is created by sagging fields.
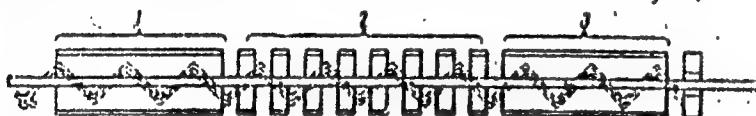
Fig. 1

Card 1/2   UDC: 621.375.93

L 20602-66
ACC NR: AP6008297

(a)

(b)
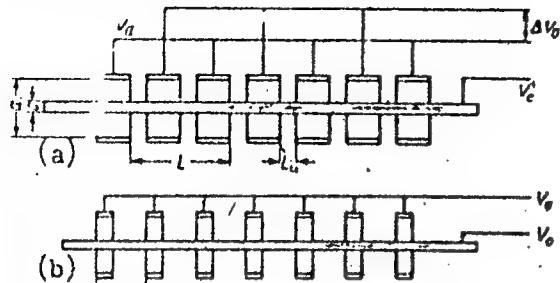
Fig. 2

Equations of the electron motion are set up, reduced to a Mathieu equation, expanded into a Fourier series, and solved according to the E. T. Wittaker method yielding a formula for the amplifier gain.   The electrostatic electron drive combined with electrostatic focusing is seen as an advantage of the above amplifier.   Its disadvantages are: 1) possible noise and 2) nonisochronous "cyclotron" oscillations under large signal conditions

[03]

Orig. art. has: 2 figures and 16 formulas.

SUB CODE: 09 / SUBM DATE: 01Apr65 / ORIG REF: 003 / OTH REF: 002
ATD PRESS: 4225

Card 2/2 BK

L 04214-67 EWT(1)
ACC NR: AR6015867 SOURCE CODE: UR/0275/65/000/012/A023/A023

AUTHOR: Kurayev, A. A.; Kuvshinov, Yu. N.

TITLE: An approximate kinematic analysis of the nonlinear characteristics of a helitron

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12A159

REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. 1. Saratov, Saratovsk. un-t, 1964, 118-131

TOPIC TAGS: successive approximation, nonlinear motion equation, rectangular waveguide, SHF oscillator, backward wave oscillator

ABSTRACT: A method of successive approximations is developed for the solution of essentially nonlinear equations of electron motion in an E-type helitron-SHF oscillator. These equations under specific conditions were reduced to a system analogous (excluding the sign in the equation of motion) to a corresponding system for linear O-type devices. An analysis of the dependence of the efficiency of the helitron on the current magnitude of the device is performed with the extensive use of the abovementioned analogy in the nonlinear properties of O- and E-type devices. The approximate equations obtained are also applied to an analysis of a resonance BWT (backward-wave tube), i.e., to a narrow-band circuit of increased efficiency and power and a

Card 1/2 UDC: 621.385.69

L 04214-67

ACC NR: AR6015867 O

backward-wave oscillator with a helical magnetodirected flow of electrons, located in a rectangular waveguide. [Translation of abstract] Bibliography of 7 titles. D. Ya.

SUB CODE: 09

Card 2/2

L 04216-67   EWT(1)
ACC NR: AR6015858   SOURCE CODE: UR/0275/65/000/012/A004/A004

AUTHOR: Kurayev, A. A.

TITLE: Features of starting conditions in super-high-frequency oscillators with curvilinear periodical electron fluxes and unmodified waves

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 12A21

REF SOURCE: Tr. molodykh uchenykh. Saratovsk. un-t. Vyp. fiz. Saratov, 1965, 23-42

TOPIC TAGS: electron flux, SHF oscillator, magnetron

ABSTRACT: An analytic investigation is made of a two-dimensional problem of the starting characteristics of a E-type device: a helitron (H), assuming small transverse dimensions of the reaction space of the device, low HF-disturbances of the steady-state trajectories of the electrons (E) for thin E fluxes. In the analysis of the effect of the space charge (SC) on the grouping of electrons it is demonstrated that in the G under the effect of the radial and azimuthal forces of repulsion of electrons, azimuthal grouping is improved, and besides it is found that in devices with low SC densities, the application of internal transmission lines is more effective from the standpoint of starting conditions, and in devices with high SC densities, external transmission lines, although the general dependence is such that as the SC density increases $(CN)_{st}$

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L 04216-67

ACC NR: AR6015858

O

decreases. In the analysis of the effect of reflection from the load on the starting conditions of a G it is demonstrated that as the length of the G system decreases, the degree of the dependence of $(CN)_{st}$ and ω_{st} upon the reflection factor from the load sharply increases. A number of graphs are given characterizing the starting conditions of the G in various parameters of the device calculated according to the formulas obtained. [Translation of abstract] Bibliography of 2 titles. D. Ya.

SUB CODE: 09

Card 2/2

SHEVCHIK, V.N.; KURAYEV, A.A.

General dispersion equation of a traveling-wave tube with a
peroidical delay structure. Radiotekh. i elektron. 6 no.9:1519-
1532 S '61.   (MIRA 14:8)
               (Traveling-wave tubes)

KURAYEV, A.A.; ROMANOV, B.N.; SHEVCHIK, V.N.

Start conditions in E-type generators. Radiotekh. i elektron. 9
no.6:983-993 Je '64. (MIRA 17:7)

KURAYEV, A.A.

Spurious oscillations in E-type oscillators due to the action of high-frequency space charge fields. Radiotekh. i elektron. 11 no.1:156-161 Ja '66.   (MIRA 19:1)

1. Submitted March 3, 1965.

KURAYEV, A.A.; ROMANOV, B.N.

Effect of the reflected load on the start conditions of a
helitron. Radiotekh. i elektron. 9 no.6:994-1000 Je '64.
(MIRA 17:7)

KURAYEV, A.A.; SHEVCHIK, V.N.

Special feature of the interaction of a relativistic helical
flow of electrons with an electromagnetic wave. Radiotekh. i
elektron. 9 no.6:1083-1086   Je '64.   (MIRA 17:7)

characteristics of an E-type BW oscillator — helitron — with these simplifying assumptions: (a) no electrons hit the h-f electrodes, (b) no reflection in the h-f line, (c) very small space charge, and (d) stationary electron trajectories are helical with a constant radius and a small pitch. A set of initial excitation and

KURAYEV, A. I.

EXCERPTA MEDICA   Sec.2 Vol.10/3 Physiology March 57

1291. KURAYEV A.I. and LOGINOV A.A. Chair of Normal Human and Animal Physiol., 'S.M.Kirov' Univ., Baku. *Effect of stimulation of interoceptors on the chronaxie of the motor zone of the cerebral cortex FIZIOL. Ž. 1956, 42/9 (752-757) Graphs 3 (Russian text)

Mechanical stimulation of the rectum by inflation of a rubber balloon lengthened, in lost experiments, the chronaxie of the motor zone of the cerebral cortex in cats, while stimulation of the urinary bladder shortened the chronaxie. However, if stimulation of the urinary bladder follows rectal stimulation it also may prolong the chronaxie, and vice versa, rectal stimulation may shorten the chronaxie after precedent stimulation of the urinary bladder.

Simonson - Minneapolis, Minn.

KURAYEV, A.V.; PANFILOV, V.T.; SEMENKOV, P.L.; SOSKOV, B.Ya.; ZARUBIN, A.G.,
    otvetstvennyy red.; LEZHNEVA, Ye.I., red.izd-va; MATVEYEVA, Ye.N.,
    tekhn.red.; TIKHANOV, A.ya., tekhn.red.

[ZIL-164 truck; instructions for operation] Avtomobil' ZIL-164;
instruktsiia po ekspluatatsii. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1958. 175 p.   (MIRA 11:4)

1. Moskovskiy avtomobil'nyy zavod im. I.A.Likhacheva. 2. Zamestitel'
glavnogo konstruktora Moskovskogo avtomobil'nogo zavoda im. I.A.
Likhacheva (for Zarubin)
        (Motortrucks)

KUBAYEV, A.V.; SEMENKOV, P.L.; BLEYZ, N.G.; BULAVA, V.P.; VYAZ'MIN, V.A.;
GOLUBEV, B.S.; DYSHMAN, B.M.; KARELIN, B.S.; KAYUKOV, G.I., KUGEL',
N.V.; MASHATIN, V.I.; RAGUSKAYA, L.F.; RUBINSHTEYN, S.M.; SMIRANOV,
A.B.; TARASOV, L.A.; FEDOROVA, A.A.; FEDOROV, L.N.; TSEFKIN, M.F.;
SHAYNVICH, A.G.; VASIL'YEVA, I.A., red. izd-va; TIKHANOV, A.Ya.,
tekhn. red.

[ZIL-158 and ZIL-158A motorbuses; instructions for operation] Avtobusy
ZIL-158 i ZIL-158A; instruktsiia po ekspluatatsii. Moskva, Gos.
nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 193 p.
(MIRA 11:7)

1. Moskovskiy avtomobil'nyy zavod.
(Motorbuses)

ARMAND, G.B.; VYAZ'MIN, V.A.; GRINSHTEYN, L.M.; GOL'DBERG, G.I.; GOLUBEV,
    B.S.; KASHLAKOV, M.V.; KRASNOPEVTSEV, M.P.; KUZNETSOV, S.I.;
    KURAYEV, A.V.; KAYUKOV, G.I.; MASHATIN, V.I.; MOLOTILOV, V.I.;
    NERUSH, A.R.; PRAL', G.I.; RAGUSKAYA, L.F.; RUBINSHTEYN, S.M.;
    SEMENKOV, P.L.; TARASOV, L.A.; FEDOROVA, A.A.; TSEPKIN, M.F.;
    SHAYEVICH, A.G.; ZARUBIN, A.G., otv.red.; VASIL'YEVA, I.A., red.
    izd-va; SOKOLOVA, T.F., tekhn.red.

    [ZIL-157 motortruck; operation and service] Avtomobil' ZIL-157;
    instruktsiia po ekspluatatsii. Gos.nauchno-tekhn.izd-vo mashino-
    stroit.lit-ry, 1958. 235 p.   (MIRA 11:12)

    1. Moskovskiy avtomobil'nyy zavod.
                (Motortrucks)

KUZNETSOV, Sergey Ivanovich; ZUBAREV, Aleksey Afanas'yevich; KURAYEV,
   Aleksandr Vasil'yevich; PANFILOV, Vladimir Trofimovich;
   KOSOROTOV, B.V., inzh.-polkovnik zapasa, red.; SOKOLOVA, G.F.,
   tekhn. red.

   [ZIL motortruck] Gruzovye avtomobili ZIL. Moskva, Voenizdat,
   1962. 495 p.   (MIRA 15:6)
                           (Motortrucks)

YERSHOV, B.V.; ZALETAYEV, M.V.; ZARUBIN, A.G., nauchn. red.;
     KURAYEV, A.V., nauchn. red.

     [ZIL-130 motortrucks; basic model and its modifications.
     Album of automobile designs] Gruzovye avtomobili ZIL-130;
     osnovnaia model' i ee modifikatsiia. Al'bom konstruktsii
     avtomobilei. Moskva, Kolos, 1965. 50 p. (MIRA 18:6)

L 17625-63   EWT(1)/EDS   AFFTC/ASD   S/056/63/044/003/036/053   54
                                                                              53

AUTHOR: Kurayov, E. A. and Sannikov, S. S.

TITLE: Coalescence of photons in the Coulomb field of nuclei 19

PERIODICAL: Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3,
             1963, 1015-1022

TEXT: Z. Fried (Ref. 1: Nuovo Cim., 22 1303, 1961) investigated the coalescence
of low frequency photons on electrons (an inverse double Compton effect). The
authors investigate the same problem for photons of high frequencies ($\omega_1 \gg m$;
m = mass of the electron, ω_1 = frequency of the photons) and show that the basic
mechanism of coalescence of such photons is the coalescence in the Coulomb field
of the nucleus. They obtain expressions for the probability of such type of
coalescence and specialize them for the limiting cases of large and small photon
frequencies as compared to the electron mass. Coalescence of photons in the high
frequency region is investigated by the dispersion relation method. The low
frequency range is investigated by introducing radiative corrections to the
Lagrangian function of the electromagnetic field. At low frequencies their results

Card 1/2

L 17625-63   S/056/63/044/003/036/053

Coalescence of photons...

agree with those in Ref. 1.   There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR (Physico-
               Technical Institute of the Academy of Sciences UkrSSR)

SUBMITTED: October 22, 1962

Card 2/2

L 2756-66   EWT(m)/T/EWA(m)-2
ACCESSION NR: AP5024341

UR/0367/65/002/002/0272/0276

AUTHOR: Volkov, D. V.; Kurayev, E. A.

TITLE: $K \to 2\pi$ decays and $SU(3)$ symmetry

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 272-276

TOPIC TAGS: unitary symmetry, particle symmetry, tadpole model, meson, radioactive decay

ABSTRACT: $K \to 2\pi$ decay is analyzed on the basis of the Coleman-Glashow dynamic model (the "tadpole model"). Two versions of this model are considered. The weaker version considers only the transitions into vacuum of scalar particles which belong to the unitary octet. In the strong version, diagrams are considered in which the octet of scalar particles also acts as intermediate resonances with the lowest energies. Since scalar particles are the virtual states with lowest energy for the $K \to 2\pi$ process, the second version of this model is of greatest interest for this type of decay. A general expression is derived for the amplitude of decay in the first version with regard to moderately strong and electromagnetic interactions. It is shown that the second version of the tadpole model results in suppression of

Card 1/2

L 2756-66
ACCESSION NR: AP5024341 O

electromagnetic transitions in the tadpole diagrams for masses of the scalar octet
particles considered by Coleman and Glashow (S. Coleman, S. L. Glashow, *Phys. Rev.*,
134, 671, 1964). $K^+ \to \pi^+\pi^0$ decay takes place through tadpole-less diagrams, which
are difficult to evaluate because of their complexity. Orig. art. has: 2 figures,
10 formulas.

ASSOCIATION: none

SUBMITTED: 15Mar65   ENCL: 00   SUB CODE: NP

NO REF SOV: 001   OTHER: 006

Card 2/2

KUZNETSOV, Ye. A.; KURAYEV, I. V.; PROTOPOPOV, V. S.; VEN FEN

"Experimental Investigation of heat transfer to super-critical carbon dioxide."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Moscow Power Engineering Inst.

KURAYEV, V.

For the Communist tomorrow. Avt. transp. 37 no.5:5
My '59.

(MIRA 12:8)

1.Peredovoy shofer Moskovskogo avtokhozyaystva   No.2
Mosoblavtotresta.
(Socialist competition)

KURAYEV, V. G.

Kurayev, V. G.

"Theoretical and Experimental Investigation of AC Magnet Circuits Magnetized with DC Current." Min Higher Education USSR. Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov. Moscow, 1955 (Dissertation for the degree of Candidate in Technical Science)

SO: Knizhnaya letopis' No. 27, 2 July 1955

BUL', Boleslav Kazimirovich; KURAYEV, V.G., red.

[Principles of the theory and design of magnetic circuits]
Osnovy teorii i rascheta magnitnykh tsepei. Moskva, Izd-
vo "Energiia," 1964. 463 p.
(MIRA 17:6)

KURAYEV, V   V

Metalloverdeniye dlya stroiteley (metal working for construction workers)
Moskva, Gos. izd-vo lit-ry po stroitel'-stvu I Arkhitekture, 1952.

193 P Illus, graphs, diags, tables.
Literatura: P. 193

SO: N/5
     615.9
     .K91

26.2181

AUTHORS: Petukhov, B.S., Shlykov, Yu.P., Kurayeva, I.V.,
            Kazakova, Ye.D., and Prozorov, V.K.

S/096/60/000/010/014/022
E194/E135

TITLE: Calculation of Transient Temperature Fields in
            Multi-Layer Walls with Internal Heat Evolution by
            the Hydrothermal Analogy Method

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: The temperature distribution is calculated in two
and three layer walls with internal sources of heat, required
to determine the temperature gradients during calculation of
the strength of assemblies in several types of heat exchange
equipment. 2|

ASSOCIATION: Moskovskiy energeticheskiy institut
             (Moscow Power Institute)

Card 1/1

KURAYEVA, I.V.; PROTOPOPOV, V.S.

Second All-Union Conference on Heat and Mass Transfer.
Teplofiz. vys. temp. 2 no.4:654-655 Jl-Ag '64.

(MIRA 17:9)

L 12879-66   EWT(1)/EWP(m)/EWT(m´/ETC(F)/EPF(n)-2/EW(m)/EW(1)/EWP(1)/FCS(k)/EWP(b)/
ETC(m)/EWA(I)
ACC NR: AT6001349   IJP(c)/RPL   JD/WW/JW/RM   SOURCE CODE: UR/0000/65/000/000/0032/0039

AUTHOR: Krasnoshchekov, Ye. A.; Protopopov, V. S.; Wang, Feng; Kurayeva, I. V.

ORG: Moscow Power Engineering Institute(Moskovskyy energeticheskiy institut)

TITLE: Experimental study of heat transfer in the supercritical region for carbon dioxide

SOURCE: Teplo- i massoperenos. t. 1: Konvektivnyy teploobmen v odnorodnoy srede (Heat and mass transfer. v. 1: Convective heat exchange in a homogeneous medium). Minsk, Nauka i tekhnika, 1965, 32-39

TOPIC TAGS: heat transfer, heat transfer agent, carbon dioxide, heat exchanger, cooling

ABSTRACT: Since there is no published data available on the heat transfer of fluids at close to critical conditions, a study was made of the heat transfer in the turbulent flow of carbon dioxide at very high temperature gradients. The experiments were conducted in a steel tube with a 4.05 mm inner and a 5.0 mm outer diameter and a length of 51 d. The experiments were conducted with pressures of 785 — 981 n/m^2, mean fluid temperatures of 20 — 110C, temperature gradients up to 500C, and heat flux densities of 2.6 10^6 w/m^2. Changes in the liquid and wall temperatures along the tube were plotted. The experimental data could be correlated with an accuracy of

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L 12679-66

ACC NR: AT6001349

±20% by use of the following formula:

$$Nu_\ell = Nu_0 \left(\frac{\rho_\ell}{\rho_\ell}\right)^{0.3} \left(\frac{\bar{c}_p}{c_{p \cdot \ell}}\right)^n.$$

$$n = 0.4 \text{ at } T_w/T_m \leqslant 1 \text{ or } T_\ell/T_m > 1.2;$$

$$n = n_1 = 0.22 + 0.18(T_w/T_m) \text{ at } 1 \leqslant T_w/T_m \leqslant 2.5;$$

$$n = n_1 + (5n_1 - 2)(1 - T_\ell/T_m) \text{ at } 1 \leqslant T_\ell/T_m \leqslant 1.2,$$

where Nu_ℓ is the liquid Nusselt number; Nu_0 is the Nusselt number determined by a theoretical formula previously derived by B.S. Petuchov and V.V. Kirillov (Teplo-energetika, No 4, 1958); ρ, density; c_p, specific heat at constant pressure; T_m, temperature at which the heat capacity of the liquid has a maximum; T_w, wall temperature; and subscripts ℓ and w refer to the condition of the liquid and the wall, respectively. The graphs showed that the wall temperature increases more sharply than the liquid temperature. At small heat flux densities and large mass flow rates, the wall temperature increases steadily as the liquid temperature increases, i.e., in the flow direction. However, at relatively large heat flux densities and small mass flow rates, the wall temperature increases up to the point where the liquid temperature equals the temperature at which the heat capacity is a maximum, then it decreases, and then, as the liquid temperature increases further, it increases again. Orig. art. has: 3 figures.
                                                                              [PV]

SUB CODE: 2Q /3 SUBM DATE: 31Aug65/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS:
                                                                              4/83

Card 2/2 HW

CHUYKO, Ye.; KURAYEVA, N.

Elimination of diphtheria in Sevastopol. Pediatriia   no.6:55-
59 '61.   (MIRA 14:9)
                    (SEVASTOPOL—DIPHTHERIA)

KURAYEVA, T. N., Cand Med Sci --"Clinic of ~~births~~ *partum* and ~~of~~ the postnatal period in ~~the presence of~~ *parturient* fever at births." Mos, 1961. (First Mos Order of Lenin Med Inst im I. M. Sechenov) (KL, 8-61, 262)

- 481 -

EBELA, A.; IKAUNIECE, A.; ILZINA, B.; KURAYEVA, T.; KUROSA, V.;
    MIKE, B.; OSA, Z.; SUBS, R., prof.; ENDZELINA, M., red.

[Gynecology] Ginekologija. [By] A.Ebela un citi. Riga,
Liesma, 1965. 180 p. [In Latvian]   (MIRA 18:6)

ACC NR: AT6012373   SOURCE CODE: UR/0000/65/000/000/0082/0088

AUTHORS: Kishkin, S. T.; Polyak, E. V.; Solonina, O. P.; Moiseyev, V. N.; Taranenko,
G. N.; Kurayeva, V. P.

ORG: none

TITLE: Structural transformations in titanium alloys

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego
splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium
alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 82-88

TOPIC TAGS: titanium, titanium alloy, electron microscopy/ VT3-1 alloy, VT14 alloy,
VT16 alloy, VT15 alloy, VT10 alloy
annealing, phase composition, alloy,

ABSTRACT: The structural transformations induced by annealing in ($\alpha + \beta$) alloys of
the types VT3-1, VT14, and VT16, in β alloy of VT15 and in α alloy of VT10, con-
taining an intermetalloidal strengthening agent, were studied. The study was carried
out by means of electron microscopy. Electron microscope photographs of specimens
annealed at different temperatures are presented. Annealing alloys under different
conditions leads to a phase transformation in the alloys. The optimum phase composi-
tion that possesses maximum strength and plasticity was found to consist of single α -
phase regions and highly dispersed heterogeneous ($\alpha + \beta$) phase regions resulting
from the decomposition of the metastable β-phase. Thermal stability of alloys may be
increased by the addition of aluminum to the alloy. Orig. art. has: 2 figures.
Card 1/1   SUB CODE: 11/ SUBM DATE: 02Dec65

S/762/61/000/000/020/029

AUTHORS: Glazunov, S.G., Kurayeva, V.P.

TITLE: The titanium alloy BT10 (VT10) with elevated creep limit.

SOURCE: Titan v promyshlennosti; sbornik statey. Ed. by S.G. Glazunov. Moscow, 1961, 216-226.

TEXT: The paper summarizes the current state of the metallurgy of Ti-Al-Cu-Sn alloys (refs. to Bunshah, R.F., Margolin, H., Trans. ASM, v.51, 1959; Holden, F.C., et al., J.Metals, no.7, 1955, 117; Frost, P.D., Metal Progress, v.75, no.4, 1959, 91-96), which have been found to be highly creep-resistant, and describes an experimental investigation of alloys containing 4.8-6% Al, 2-3.7% Cu, and 2-3% Sn, intended to attain a high-strength Ti alloy with a maximal creep limit at 500°C. TГ0 (TG0) sponge Ti was used with the addition of pure metallic Al, Cu, and Sn and binary Al-Cu and ternary Al-Cu-Sn ligatures. The melts were fused in a vacuum arc furnace. Forging preheat to 1,030-1,050° was performed in an electric furnace. Following 1-hr anneal at 800° and air-cooling, tests were performed at room T and elevated T. Thermal stability was tested by room-T tests after 50-100-hr aging at 500° with and without stress. Both Cu and Al are strengthening additions. Yet, they diminish the plasticity in equal measure. 500° aging strengthens the alloy and reduces its plasticity. This consideration limits the Cu content to 3.5% and the Al content to 6%. The microstructure of the alloy comprises an α phase and an intermetallic Ti₃Cu compound. Aging does not effect any appreciable
Card 1/3

The titanium alloy BT10 (VT10) with elevated creep...   S/762/61/000/000/020/029

structural change. High-temperature (HT) tests at $500^{\circ}C$ indicate improved short-duration strength with increasing Cu and Al content. 100-hr stress-rupture tests indicated that a strength of 48-52 kg/mm^2 requires no less than 5% Al and 2.8% Cu. Such alloys exhibit stress-rupture strengths of 30 kg/mm^2 at 550° and 18 kg/mm^2 at 600°. Cu and Al improve the creep resistance of the alloy, with an optimal creep strength with 6% Al and 3.7% Cu, but at a sacrifice in plasticity. Sn, also, exerts a favorable effect on creep strength. The residual-creep-strain data exhibited some scatter. Optimal overall mechanical properties at 20 and 500° with satisfactory thermal stability are thus attained by an alloy with 5-6% Al, 2.8-3.5% Cu, and 2-3 % Sn. Edurance-test data are reported as entered on the specification sheet for the VT10 alloy, together with data for the determination of a scale factor to account for the diameter of the test specimen. At RT the 10^{-7}-cycle endurance limit for a smooth specimen 5-mm diam is appx. 50 kg/mm^2. Compression, torsion, and shear-test data are tabulated. Ultra-short-duration tensile tests at 600, 700, and 800° are reported and compared with similar data on the BT8 (VT8) alloy. Low-T test results obtained at -40, -70, and $-196^{\circ}C$ are reported. A complete full-page tabulation of the physical properties of the VT10 alloy is provided. Inasmuch as Cu is a eutectoid β stabilizer, tests were made to explore the effect of quench, temper-ing, rate of cooling during quench, etc., on the properties of VT10. The results were totally negative; quench cannot fix the β phase (cf. Blok, N.I., et al., same

Card 2/3

The titanium alloy BT10 (VT10) with elevated creep... S/762/61/000/000/020/029

compendium, pp. 227-231, Abstract S/762/61/000/000/021/029). VT10 is not an $\alpha+\beta$ Ti alloy, but an α alloy with an intermetallic-compound strengthener. The present study essentially is an investigation of the relaxation and recrystallization process following forging deformation and reheating. Ti is characterized by a less than normal (for metals) uniformity in the rate of recrystallization and the grain size resulting from it. Reheating of VT10 after deformation leads to relaxation at 700°, as indicated by sharply defined X-ray interference rings with a distinct doublet. Recrystallization sets in at 800°, with individual reflections on the rings. The number of individual points increases with increasing T. Texture is preserved up to 950°. Beyond 950° the rings are transformed into individual spots, which suggests completion of the recrystallization at a T which coincides with the phase-recrystallization T. The end product of this investigation is a VT10 alloy of the Ti-Al-Cu-Sn system with an elevated creep strength (28-30 kg/mm^2 with 0.2% residual strain after 100 hrs at 500°C). The alloy is currently being operationally tested on parts operating at 500°. There are 11 figures (including an over-page-size fold-out with X-ray photos), 4 tables, and 4 references (1 Russian-language Soviet and 3 English-language U.S., all cited in the text). The participation of lab assistant Zh.D.Afanas'yeva in the experimentation and that of M.I.Yermolova in the recrystallization X-ray study is acknowledged.

ASSOCIATION: None given.

Card 3/3

S/762/61/000/000/021/029

AUTHORS: Blok, N.I., Glazova, A.I., Kurayeva, V.P., Lashko, N.F.

TITLE: Phase analysis of the BT10 (VT10) titanium alloy.

SOURCE: Titan v promyshlennosti; sbornik statey. Ed. by S. G. Glazunov. Moscow, 1961, 227-231.

TEXT: This paper describes an experimental X-ray and chemical analysis of electrolytically precipitated VT10 alloy (after 1-hr 800°C anneal in vacuum), performed by a method described in Zavodskaya laboratoriya, no.2, 1958, 141. The investigation was motivated by a desire to determine whether the age hardening of this creep-resistant Ti-Al-Cu-Sn alloy is produced by the separation of some intermetallic-compound phase, since this alloy, like the two-phase Ti-Cu alloys, has no residual β phase that could be fixed by quenching. Reference is made to the phase diagram of A. Joukainen, et al. (J. Metals, v. 4, no. 7, 1952, 766), according to which Ti_2O is the intermetallic phase richest in Ti. The present investigation identified an intermetallic phase of variable composition with a tetragonal face-centered crystal lattice of the Ti_3Cu type, namely $(Ti, Al, Sn)_3Cu$. The phase compositions of VT10 alloy with slightly variable Cu and Al contents and after cooling at various rates, as obtained by the X-ray and the chemical method, are tabulated. All findings support the conclusion that the (Ti, Al, Sn)-to-Cu ratio is extremely close to 3. The Ti_3Cu-type phase thus identified is a solid solution in which some nodes of the

Card 1/2

Phase analysis of the BT 10 (VT 10) titanium alloy.   S/762/61/000/000/021/029

crystalline lattice, ordinarily occupied by Ti, are occupied by Al and Sn atoms. An increase in Cu content from 2 to 3% increases the quantity of $(Ti, Al, Sn)_3Cu$ continuously from 5.75 to 8.35%. No comparable change occurs upon increase of the Al content from 5 to 6%. It is concluded that the VT 10 alloy gives rise to highly dispersive products of a eutectoid reaction $\beta \to \alpha + (Ti, Al, Sn)_3Cu$. X-ray analysis indicates that the fundamental phase in VT 10 is an α phase, both primary and transformational (α'). No residual β phase can be found in the alloy. It is known that in Ti-Cu alloys the eutectoid decomposition upon cooling from elevated T occurs very rapidly. It proceeds even more speedily in alloys of the Ti-Al-Cu-Sn system, and the β phase decomposes in toto into an α phase and an intermetallic compound. The effects of the temperature levels and rates of cooling on the phase composition are tabulated in detail. The structural changes in the VT 10 alloys apparently are determined by three factors: (1) Change in the size of the primary grains; (2) change in the shape of the particles of transformed β phase (α' phase); and (3) change in the shape of the particles of the intermetallic phase $(TiAlSn)_3Cu$ and the character of its distribution. There are 1 figure, 5 tables, and 4 references (1 Russian-language Soviet, 2 English-language, and 1 German). The participation of Zh. D. Afanas'yeva, Ye. A. Vinogradova, Ye. I. Zvontsova, and L. V. Polyakova in the experimental portion of the investigation is acknowledged.

ASSOCIATION: None given.   2/2

Card 2/2

18 1285

21392
S/032/61/027/012/002/015
B119/B147

AUTHORS: Blok, N. I., Glazova, A. I., Lashko, N. F., Kurayeva, V. P.
             Molchanova, Ye. K.
TITLE: Phase analysis of alloys on titanium basis

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 12, 1961, 1470 - 1472

TEXT·   α+β-alloys with stabilized β-phase, and α-alloys with intermetallic
hardening were examined. The individual phases were isolated by anodic
solution of the alloy in anhydrous electrolyte (3 g of KCNS or 2 g of
LiCl, 10 g of citric acid, and 1200 milliliters of methanol). There-
after, they were subjected to X-ray structural and chemical analysis.
Mo, V, Nb, and Ta were identified as stabilizers for the β-phase, the effect
of which decreases in the sequence mentioned. (In the presence of 4% Mo
the content of the β-phase in the alloy is 11%; at 4% V, it is 9%, and
at 4% Nb or Ta, only 3%). After forging, the anodic deposit of these
alloys consists entirely of β-phase. In the presence of 4% Ta, alloys
aged for 100 hr at 500°C show only small quantities of β-phase, whereas
4% Mo or V completely prevent the β-phase from decomposing. Ti-Cu
alloys containing up to 5% Cu have one phase of the composition Ti_3Cu

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21392
S/032/61/027/012/002/015
B119/B147

Phase analysis of alloys on ...

with tetragonal face-centered lattice. A phase of the type Ti_3Cu of different composition was also observed in Ti-Al-Cu-Sn alloys (containing up to 3.5% Cu). An increase of the Cu content of these alloys from 2 to 3.5% results in a rise of the content of $(Ti,Al,Sn)_3Cu$ phase from 5.75 - 6.25 to 8.02 - 8.34%. Thus, strength increases from 95 - 100 to 104 - 110 kg/mm^2. In this case, specific elongation decreases from 35 to 30 - 22%. Ye. A. Vinogradova, Ye. V. Zvontsova, and L. V. Polyakova assisted in the experiments. There are 1 figure, 3 tables, and 5 references: 2 Soviet and 3 non-Soviet. The two references to English-language publications read as follows: N. Karlsson, J. of the Institute of Metals, 79, 391 (1951); A. Gaukainen, N. J. Grant, C. F. Floe, J. of Metals, 4, no 7, 766 (1952).

Card 2/2

SOLONINA, O.P.; KURAYEVA, V.P.

Effect of tungsten on the properties and phase constitution of Ti-Al and BT3-1 alloys. Metalloved. i term. obr. met. no.2: 50-52 F '63.   (MIRA 16:3)

(Titanium-aluminum alloys--Testing)
(Tungsten)

Improving the working properties of Russian leather
S. N. Kupaitis. *Legkaya Prom.* R, No. 6, 16-17, 1958.
A method of tanning is proposed whereby washing, pickling, chrome tanning, and subsequent sulfate liquor tanning are carried out in one drum without neutralizing, resulting in savings of time and labor.   Marshall Sittig

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Fatty emulsions from naphthenic hydrocarbons   S. A. Kuraitis. *Legkaya Prom.* 8, No. 9, 12-13 1948. The influence of various electrolytes on emulsions used for de-fatting hides is reviewed.   Marshall Sittig

KULAYTIS, S. A.
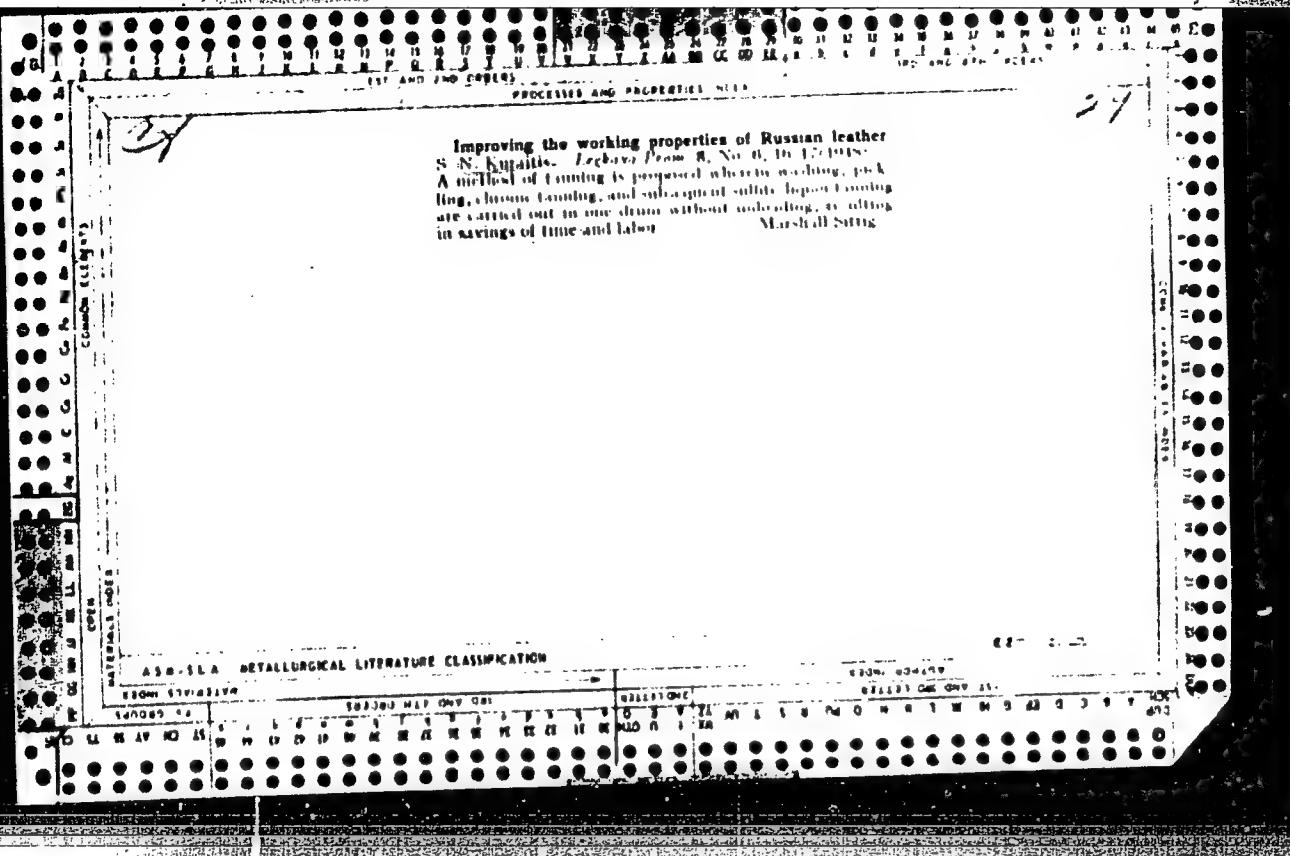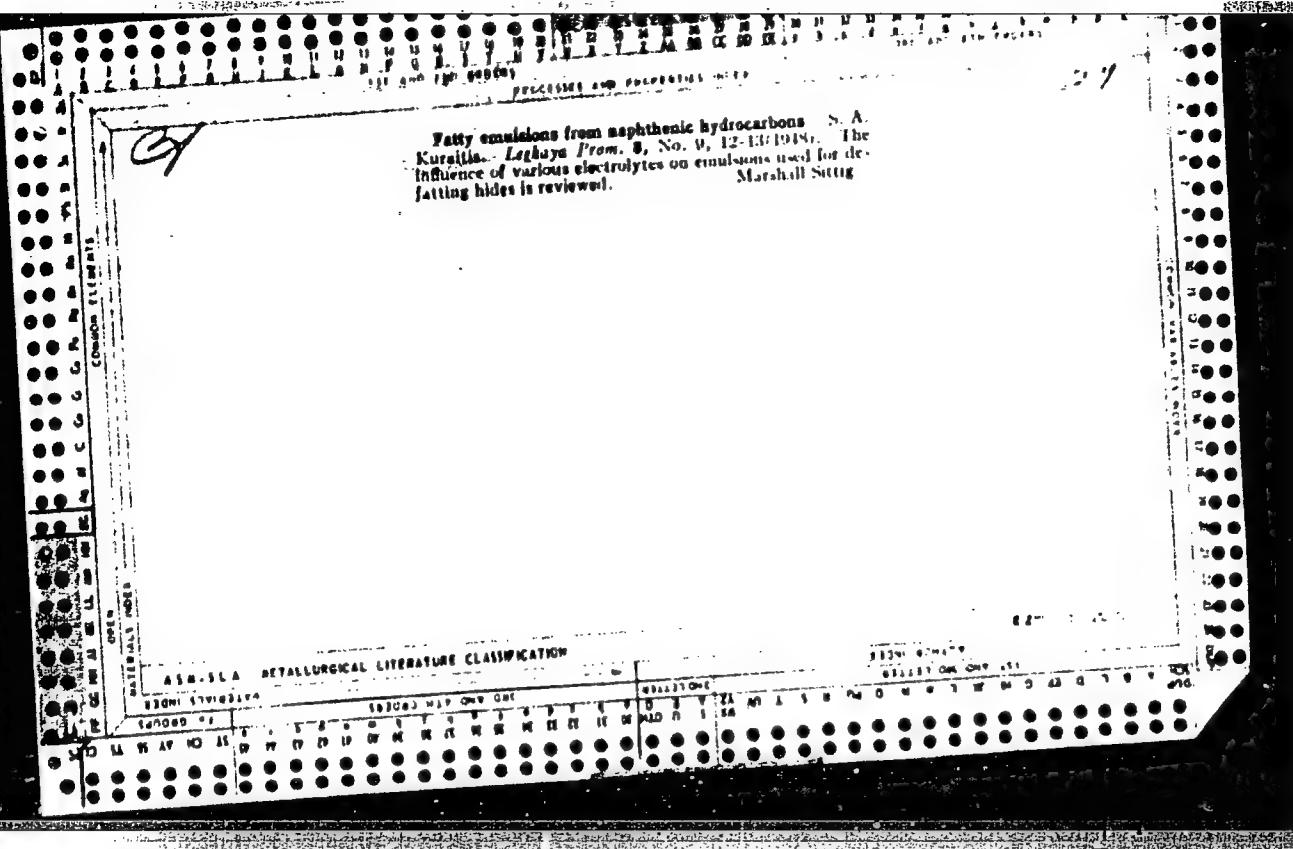
23384 Poluchenlye Syromyati Iz Pilenogo Gol'ya. Legkaya Prom-st', 1949, No. 7,
c. 22-23-

SO: LETOPIS NO. 31, 1949

CA

57

Reaction between chrome salts and sulfite cellulose tannins. S. A. Kuralion. *Legkaya Prom.* 9, No. 1, 16-17. (1949).—Sulfite cellulose tannins expelled some of the chrome from leather after chrome tanning. Treatment with sulfonaphthenic acids prior to chrome tanning did not affect the process substantially; chrome was still expelled. Two cases are possible: entry of lignosulfonic acid into the chrome complex with the expulsion of a sulfate group and the simultaneous presence of lignosulfinate and sulfite groups. In both cases, the decrease in the tanning capacity of the chrome salts can be due to both a decrease of sulfato groups in the complex sphere of the chrome and a decrease of the charge of the chrome complex.   B. Z. Kasoch

29

CA

Controlling lacquer coating for leather. S. A. Kuraltis. *Legkaya Prom.* 11, No. 5, 35-6(1951).—Sp. gr. is not a good index of suitability of lacquer; viscosity is a better index Optimum thickness is 0.05-0.07 mm. Lacquer should be dild. to a viscosity of 1 sec.(detd. with the aid of a falling ball weighing 2.00 g.) and should be spread so that 130 g. will cover 1 sq. m. of leather.   B. Z. Kamich

MIKHAILOV, B. A.

Leather Industry and Trade

Optimum conditions for drying patent leather. Leg. prom., No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

KIVANOV, I. A., KVRATTIO, D. A.

Leather Industry

Popularizing the progressive practice of Eng. F. L. Kovaleva's method. Leg. prom. no. 7, 1952

2

9. **Monthly** **List** **of** **Russian** **Accessions**, Library of Congress, November 1953. Unclassified.

KURAYTIS, S.A.; KHOKHLOV, I.A.; LYUBIMOVA, A.M.

Characteristics of tanning with basic chrome salts in the presence of
ammonium sulfate salts. Legkaya Prom. 12, No.1, 28-30 '52. (MLRA 4:12)
(CA 47 no.19:10257 '53)

HERMAN, S.A., HRULEV, I.A., VERINKOV, B.F.

Hides and Skins

Practical method of processing badger hides, Leg.
prom. 12 No. 4, 1952.

Monthly List of Russian Accessions, Library of
Congress, July 1952. Unclassified.

KURAYTIS, S.A., inzhener.

Antelope skins as raw material for cap and glove leather. Leg.prom.
14 no.9:39 S '54.   (MLRA 7:9)
     (Leather) (Gloves)

Tanning raw hides without wool with chrome tan liquor made from sodium monochromate. S. A. Kuralias. *Izgkoya Prom.* 15, No. 30, 39–41(1956). The use of Na_2CrO_4 (I) instead of $K_2Cr_2O_7$ (II) for the prepn. of the chrome-tan liquor (III) essentially modifies the tanning requiring special controls. III prepd. from I contains about 2.35 times more sulfate groups than III prepd. from II which slows up the tanning and lowers the fixation of Cr compounds by the collagen; this is due to the fact that in the presence of a considerable amt. of neutral salts, the dissocn. of carboxyl groups in the protein decreases. The intensity of III prepd. from I is 26.8% for the raw hides of sheep and pig and its 8% for the raw hides of sterile sheep and goat of Stradhow. *C.A.* 49, 13357.   Elizabeth Warmesh

KURAYTIS, S. A.

Kuraytis, S. A.   "The use of the derivatives of sulfonaphthenic
acids in the process of leather production." Min Higher
Education USSR. Moscow Technological Inst of Light Industry
imeni L. M. Kaganovich. Moscow, 1956. (Dissertation for
the Degree of Candidate in Technical Science)

So: Knizhnaya letopis', No. 27, 1956. Moscow. Pages 94-109; 111.

Kuraytis, S.A.

USSR / Chemical Technology. Chemical Products and Their Appli-   I-31
cation. Leather. Fur. Gelatin. Tanning Agents.
Technical Proteins.

Abs Jour   : Ref Zhur – Khimiya, No 3, 1957, No 10508

Author   : Kuraytis, S.A.
Inst   : Not given
Title   : The Fermentative Loosening of the Bond Between the Bristles
and the Corium

Orig Pub   : Legkaya prom-st, 1956, No 6, 24-25

Abstract   : The fermentative method of loosening the bond between the
bristles and the corium consists in the treatment of pig
skins in a bath of the following composition (in gms/liter):
orizon 6, Na_2S 5, sodium fluorosilicate 2.5, OP-10 1;
temperature 36-38°. The treatment is continued for 24
hours. The active principles in the bath are the proteoly-
tic enzymes present in the orizon, which loosen the bond

Card   : 1/2

USSR / Chemical Technology. Chemical Products and Their Appli-   I-31
         cation. Leather. Fur. Gelatin. Tanning Agents.
         Technical Proteins.

Abs Jour   : Ref Zhur - Khimiya, No 3, 1957, No 10508

Abstract   : between the hair bulbs and the follicles. Orizon also con-
             tains enzymes which dissolve the fats. The fermentation me-
             thod makes possible the production of large quantities of
             bristles of superior quality, does not lengthen the produc-
             tion cycle, and somewhat reduces the fat content in the fi-
             nished skin.

Card   : 2/2

GOLUBEVA, S.K., kand. tekhn. nauk; KURAYTIS, S.A., kand. tekhn. nauk.

Auxiliary substances used in fixation of tanning materials, dyes
and sulfonated fats in leathers. Leg. prom. 17 no.12:24-27 D '57.
      (Tanning)   (Dyes and dyeing--Leather)   (MIRA 11:1)

.... ROVA, S.K., kand.tekhn.nauk; KURAYTIS, ..., kand.tekhn.nauk

Sulfonated products from cottonseed oil and corn oil. Leg.prom.
18 no.6:36-37 Je '58.   (MIRA 12:10)
            (Leather industry) (Sulfonated oils)

KURAYTIS, S.A.; GOLUBEVA, S.K.

Synthetic tanning material No.4. Leg. prom. 18 no.9:23-26
S '58.   (MIRA 11:10)
                    (Tanning materials)

GOLUBEVA, S.K., kand.tekhn.nauk; KURAYTIS, S.A., kand.tekhn.nauk

Synthetic tannin with high forming and filling characteristics.
Kozh.-obuv.prom. no.1:30-32 Ja '59.   (MIRA 12:6)
                  (Tanning materials)

GOLUBEVA, S.K., kand.tekhn.nauk; KURAYTIS, S.A., kand.tekhn.nauk

TSNIKP-1 fixing agent. Kozh.-obuv.prom. no.6:19-22 Je '59.
(MIRA 12:9)

(Tanning)

METEBIKIN, A.I., kand.tekhn.nauk; KURAYTIS, S.A., kand.tekhn.nauk;
GOLUBEVA, S.K., kand.tekhn.nauk.

Use of pine bark tannides. Izv.vys.ucheb.zav.; tekh.leg.prom.
no.6:52-57 '59.   (MIRA 13:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut khozevenno-
obuvnoy promyshlennosti.
          (Tanning materials)

GOLUBEVA, S.K., kand.tekhn.nauk; KRASUKHIN, M.N., kand.tekhn.nauk;
     KURAYTIS, S.A., kand.tekhn.nauk; TOPOROVSKAYA, Kh.S., kand.tekhn.
     nauk; MENKEL', P.Ya., kand.tekhn.nauk; KORZINA, Ye.S., mladshiy
     nauchnyy sotrudnik; FILIPPOVA, N.B., mladshiy nauchnyy sotrudnik

     Works of the Central Scientific and Technical Institute of the
     Leather and Footwear Industry in the field of tanning materials.
     Nauch.-issl. trudy TSNIKP no. 30:27-46 '59.   (MIRA 14:5)
                    (Tanning materials)

METELKIN, A.I., kand.tekhn.nauk; KURAITIS, S.A., kand.tekhn.nauk; GOLUBEVA, S.K., kand.tekhn.nauk

Use of the fixation agent developed by the Central Scientific Research Institute of the Leather and Shoe Industry for processing goatskins. Kozh.-obuv. prom. 2 no. 11:14-16 N '60.
(MIRA 13:12)

(Hides and skins)

KURAYTIS, S.A., kand.tekhn.nauk; GOLUBEVA, S.K., kand.tekhn.nauk

Cation-active emulsifier. Izv.vys.ucheb.zav.; tekh.leg.prom. no.5:
16-20 '60.   (MIRA 13:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy
promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo
tekhnologicheskogo instituta legkoy promyshlennosti.
           (Emulsifying agents)   (Tanning)

KURAYTIS, S.A.; GOLUBEVA, S.K.; KORNYUKHINA, M.A.; KIR'YANOVA, L.F.

Characteristics of goatskin leather tanning with chromium salts
in the presence of cation-active compounds. Nauch.-issl.trudy
TSNIKP no.32:22-28 '60.   (MIRA 15:12)
                (Tanning)   (Surface-active agents)

METELKIN, A.I., kand.tekhn.nauk; KURAYTIS, S.A.

Use of pine extract tannins in processing sole leather.
Koz.-obuv.prom.3 no.4:21-23 Ap '61.   (MIRA 14:5)
                    (Tanning)

KURAYTIS, S.A., kand.tekhn.nauk; GOLUBEVA, S.K., kand.tekhn.nauk

"BNF" synthetic tanning agent. Kozh.-obuv.prom. 3 no.8:26-27
Ag '61.   (MIRA 14:10)
                    (Tanning materials)

FILIPPOVA, N.B., inzh.; KURAYTIS, S.A., kand.tekhn.nauk

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(MIRA 14:10)

(Tanning materials)